

ABSTRACT OF THE DISCLOSURE

A drive system for imparting motion to a treating implement such as a toothbrush or the like includes a cam rotatably driven around an axis of rotation by a motor. The cam has a closed loop cam track eccentric to the axis of rotation. A control member is disposed between the cam and the treating implement head. The control member has a control slot extending completely through the control member. A pivot member is located between the control member and the treating implement head. The drive system further includes a drive shaft with its drive end freely mounted in the cam track. The drive shaft extends through the control slot and through the pivot member with its driven end operatively connected to the drive connection of the implement head. As a result, when the cam member is rotated the direction of movement of the drive shaft is controlled by the drive shaft being confined for sliding movement in the control slot. The drive shaft is still capable of rotating because of its free mounting in the cam track. The torque and the angle of oscillation imparted to the movable treating elements is determined by the location of the pivot member with respect to the treating head.